



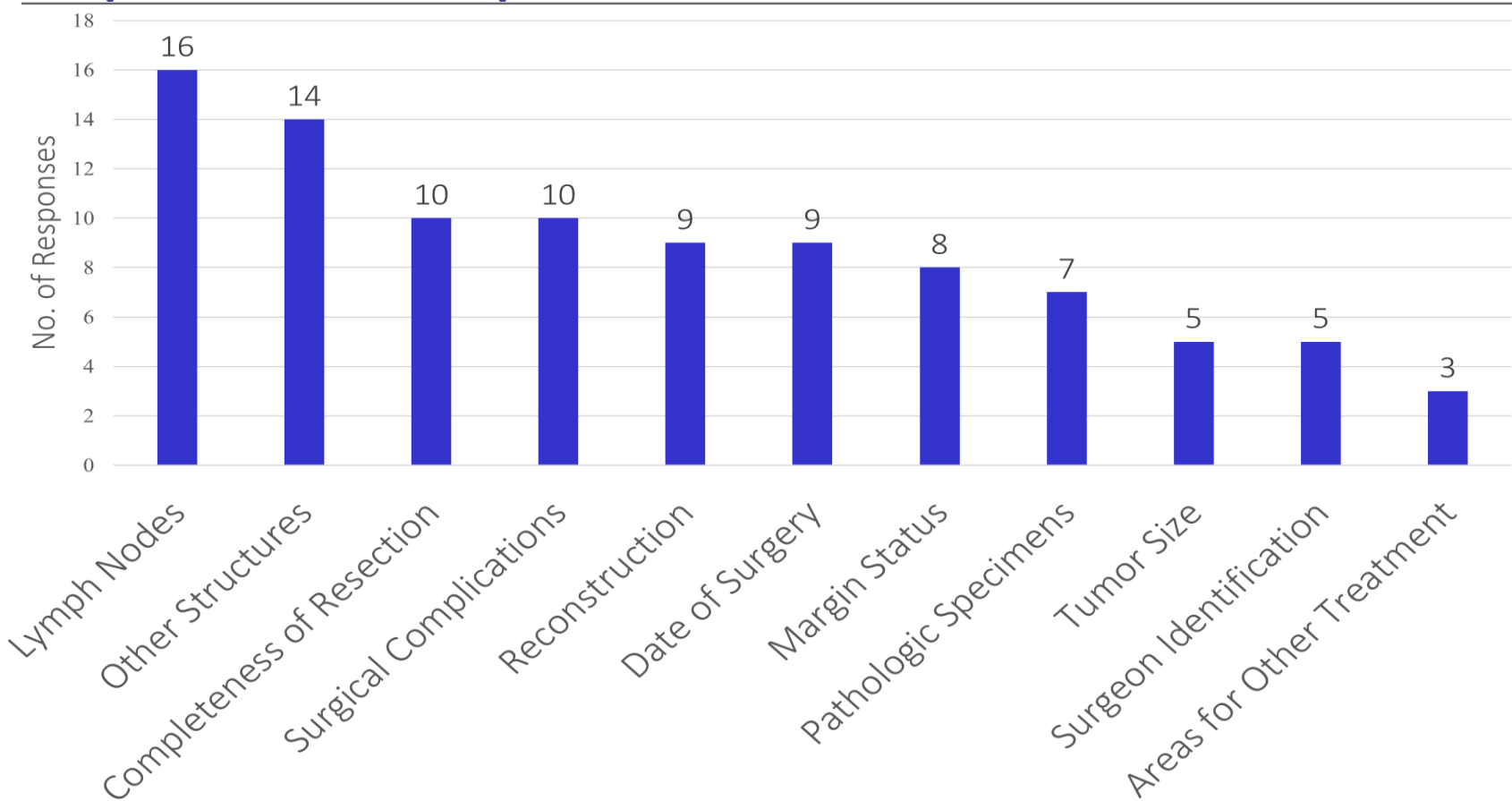
# Creation of Synoptic Operative Reports for Breast Surgery within a Multi-Hospital Healthcare System

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## Introduction

Past breast surgery operative reports have been limited to either dictated narrative descriptions with varying degrees of information, or templated statements of standard operative steps that lack individual detail. The Commission on Cancer (CoC) has instituted new synoptic operative reporting standards for cancer surgery, which require important steps of the operation be described in a synoptic operative report (SOR) format (in specific, pre-defined fields). SORs are intended to improve completeness, accuracy, and ease of data extraction, with the overall goal of improving the quality of cancer care. Our objective was to create a complete breast surgery SOR for implementation across the Northwestern Medicine (NM) health system.

### Figure 1: Information Used in Breast Cancer Operative Reports



## Methods

Although CoC operative standards only require SORs for sentinel lymph node biopsy and axillary lymph node dissection, it was decided to add mastectomy and partial mastectomy to the NM breast surgery SOR to create a complete, standardized SOR for all breast surgery within the entire NM system. A stakeholder survey was administered to surgical, radiation, and medical oncologists, pathologists, radiologists, and referring providers. The survey assessed present standards of practice regarding operative reports and identified areas of need for improvement. A complete breast surgery SOR, based on the CoC's synoptic operative reporting standards, was then created and iteratively revised for use within the NM health system. Feedback was obtained through stakeholder surveys from multidisciplinary providers, input from billing, coding, and compliance officers, and ongoing participation from breast surgeons. Frequent content feedback from stakeholders allowed for creation of an efficient and complete SOR while minimizing implementation barriers.

## Results

Stakeholder surveys indicated that SORs were not being utilized for breast surgery and there was interest from clinicians in implementing SORs. Four separate breast surgery SORs (mastectomy, partial mastectomy, sentinel lymph node biopsy, and axillary dissection) were created based on the CoC operative standards. A tool within the electronic health record was then built with information technology developers that allows for easy incorporation of the breast surgery SOR templates within surgeons' usual work flow.

### Figure 2: Surgeon Concerns Regarding SORs



## Conclusions

The breast surgery SORs are now being implemented system-wide at NM and statewide through the Illinois Cancer Collaborative. Although SORs are a novel practice for healthcare providers (including the surgeons populating the operative data), they have potential to significantly improve the quality of breast cancer care. Thoughtful implementation involving stakeholder input throughout the process can improve buy-in while minimizing the burden on surgeons.

### Figure 3: Partial Mastectomy SOR

**SURGICAL ONCOLOGY SYNOPTIC REPORTING**

Procedure/s performed: **Breast** Melanoma Wide Local Excision Colon Resection for Cancer

Breast Procedure: Mastectomy Partial Mastectomy, Lumpectomy, or Wide Local Excision Sentinel Lymph Node Biopsy Axillary Dissection

**Indications and Cancer-Specific Information**

Preoperative Cancer-Specific Goal (select all that apply): Curative intent Palliative intent Diagnostic intent Other

Additional Detail: \_\_\_\_\_

Preoperative Tumor Location (select all that apply):

In case of bilateral cancer, complete one form for each cancer

Left breast: Nipple, Central portion of breast, Upper-inner quadrant of breast, Lower-inner quadrant of breast, Upper-outer quadrant of breast, Lower-outer quadrant of breast, Axillary tail of breast, Overlapping lesion of breast, Breast, NOS

Right breast: Nipple, Central portion of breast, Upper-inner quadrant of breast, Lower-inner quadrant of breast, Upper-outer quadrant of breast, Lower-outer quadrant of breast, Axillary tail of breast, Overlapping lesion of breast, Breast, NOS

Preoperative TNM Classification - Clinical Stage at Diagnosis

cT (select one): TX (primary tumor cannot be assessed), T0 (No evidence of primary tumor), Tis (Ductal carcinoma in situ), T1 (Tumor less than or equal to 20 mm in greatest dimension), T2 (Tumor greater than 20 mm but less than or equal to 50 mm in greatest dimension), T3 (Tumor greater than 50 mm in greatest dimension), T4 (Tumor of any size with direct extension to the chest wall and/or the skin)

cN (select one): NX (Regional lymph nodes cannot be assessed), N0 (No regional lymph node metastases, by imaging or clinical examination), N1 (Metastases to movable ipsilateral Level I, II axillary lymph node(s))

**Partial Mastectomy, Lumpectomy, or Wide Local Excision**

Procedural Intent (select one):  Excision of primary tumor with grossly negative margins Re-excision for involved margins

Tumor Localization Method:  Wire or needle Non-wire localization device (ex. SAVI SCOUT) Intraoperative ultrasound Palpation Other localization device

Skin, Pectoralis Fascia, or Both Excised with Specimen (select one):  Neither Skin only Fascia only (with or without muscle) Both skin and fascia

Confirmation of Removal of Target Lesion (select one):  Not Confirmed Confirmed by gross inspection Confirmed by specimen imaging Intraoperative confirmation with pathology

Cavity Margins Excised:  No Yes

Placement of Clips or Other Fiducial Markers to Aid Radiation Targeting (select one):  No Yes

Oncoplastic Closure Performed (select one):  No Yes